

This listing of the claims replaces all prior versions in the application.

**Listing of the Claims:**

1. (Currently Amended) A modular ~~external~~ antenna assembly adapted to ~~operationally replace a[[n]] first~~ internal antenna ~~held~~ in a wireless terminal device, comprising:

a modular antenna housing; and  
~~an external a second antenna attached to the modular antenna housing,~~  
~~wherein the modular antenna housing has having a shape that is adapted to attach to a predetermined portion of [[a]] the wireless terminal device, and wherein the modular antenna housing and second antenna are configured to engage the wireless terminal device that is configured to cause the wireless terminal device to operate with the an internal second antenna while the first internal antenna remains in position in the wireless terminal device with the second antenna disengaging the internal antenna from operation.~~
2. (Original) A modular external antenna assembly according to Claim 1, further comprising a signal feed positioned in a substantially central top portion of the modular antenna housing, wherein, in position in the wireless terminal device, the modular external antenna assembly signal feed engages a signal feed of the wireless terminal device that is also configured to electrically connect the internal antenna to the wireless terminal device.
3. (Currently Amended) A modular external assembly according to Claim 2, wherein the signal feed is positioned on an inwardly and/or downwardly protruding finger that is ~~attached to an inner rear surface of the modular antenna housing, the finger being sized and configured to automatically connect the modular external antenna to the wireless terminal device signal feed when the modular housing is attached to the wireless terminal device.~~
4. (Original) A modular external antenna assembly according to Claim 1, wherein the modular antenna housing is configured to define a rear panel of the wireless terminal device.

5. (Original) A modular external antenna assembly according to Claim 1, wherein the modular antenna housing is configured to define a releaseably attachable panel member of a mobile telephone.

6. (Original) A modular external antenna assembly according to Claim 5, wherein the modular antenna housing defines an upper rear panel of the mobile telephone.

7. (Currently Amended) A modular external antenna assembly according to Claim 1, wherein the second antenna is an external antenna is a stub antenna that is configured to disengage the internal antenna, and wherein the internal antenna is a replace an internal planar inverted F-antenna.

8. (Currently Amended) A modular external antenna assembly according to Claim 1, wherein the second external antenna is configured as an external fin antenna that is configured to disengage the replace an internal planar inverted F-antenna.

9. (Currently Amended) A modular external antenna assembly according to Claim 1, wherein the second external antenna is configured as a retractable external antenna that is configured to disengage replace an the internal planar inverted F-antenna.

10. (Currently Amended) A modular external assembly according to Claim 1, in combination with the wireless terminal, wherein the second antenna comprises an external antenna is configured to mount to the rear of the wireless terminal device so as to reside over a ground plane therein, the ground plane in the wireless terminal being configured to operatively engage the internal antenna when the second internal antenna is not in position [[in]] on the wireless terminal device.

11. (Currently Amended) An aftermarket antenna kit for operational replacement of an internal antenna for a wireless terminal device internal antenna replacement kit for a wireless

~~terminal device~~, comprising:

    a modular housing;

~~an external a replacement antenna held in by~~ the modular housing, the modular housing configured and sized to mount to a portion of a predetermined wireless terminal device ~~while an internal antenna remains substantially in position in the wireless terminal device, the wireless terminal device being that~~ is configured to operate with ~~the an internal planar inverted F antenna when the modular housing is not mounted thereto, and wherein, when mounted, the modular housing is configured to disengage the internal antenna.~~

12. (Original) A kit according to Claim 11, wherein the modular housing is configured to define a rear panel of a mobile communications device.

13. (Currently Amended) A kit according to Claim 12, wherein the mobile communications device is a mobile telephone, ~~wherein the second replacement antenna comprises an external antenna, and wherein the internal antenna is an internal planar inverted F-antenna.~~

14. (Currently Amended) A kit according to Claim 13, wherein the wireless device has a ~~first rear cover that holds an internal planar inverted F antenna thereon and is~~ releaseably attachable ~~first rear cover to the wireless terminal device, and wherein the~~ modular antenna housing defines a second rear cover that is configured to interchangeably and releaseably attach to the wireless device so as to replace the first rear cover.

15. (Currently Amended) A kit according to Claim 12, wherein the modular ~~antenna~~ housing comprises signal and ground connectors that reside substantially centrally in a top portion of the modular housing and automatically engage a signal feed in the wireless terminal device when the modular antenna housing is in position on the rear of the wireless terminal device.

16. (Currently Amended) A wireless terminal product, comprising:

(a) a housing having opposing front and back portions, the back portion configured with a cavity and frame that is sized and configured to releaseably serially accept one of a desired interchangeable an- first or second upper rear panel to enclose the cavity, the housing configured to enclose a transceiver that transmits and receives wireless communications signals;

(b) a ground plane disposed within the housing;

(c) a first planar inverted-F internal antenna configured and sized to be positioned within the housing and electrically connected with the transceiver, wherein the first internal antenna comprises a planar dielectric substrate and a planar conductive element disposed on the planar dielectric substrate, and wherein the internal antenna is integral with a first upper rear panel;

(d) an external a second antenna configured and sized to be mount to positioned within the housing and be held byon the second a second, releaseably attachable, upper rear panel while the first internal antenna remains in position in the housing member, wherein the first and second upper rear panels with the internal and external antenna, respectively, are configured and sized to be interchangeably attachable to the housing; and

(e) a signal feed configured to electrically connect to either of the first internal antenna when the second rear panel with the second antenna is not mounted to the housing and electronically connect to the second antenna when the second rear panel with the second antenna is mounted to the housing-and external antennas via a connector positioned in the cavity of the housing, responsive to whether the first or second upper rear panel with the second antenna is in position on the housing wireless terminal, wherein, in position, the second rear panel with the second antenna is configured to disengage the first internal antenna from operation.

17. (Currently Amended) A wireless terminal product according to Claim 16, wherein the wireless terminal product is a mobile communications device; and wherein the device further comprise (f) a ground feed connector disposed in the housing cavity proximate the

signal feed connector, electrically connected to only one of the first internal and second external antennas depending on which of the first and second upper rear panels are in position on the housing-wireless terminal.

18. (Original) A wireless terminal product according to Claim 16, wherein the wireless terminal product comprises a wireless mobile telephone.

19. (Currently Amended) A method for retrofitting a wireless device configured to operate with an internal antenna to allow operational replacement of the internal antenna with an external a replacement antenna:

providing a wireless terminal with a housing and the an first internal antenna;  
providing mounting an external modular antenna assembly that has a predetermined shape and size that is configured to mount to the wireless terminal while the first internal antenna remains in the housing, wherein the modular antenna assembly comprises a second antenna; and

disengaging replacing the internal antenna from operation responsive to the mounting of the modular antenna assembly so that the wireless terminal operates with the second external antenna instead of the first internal antenna.

20. (Currently Amended) A method according to Claim 19, wherein the wireless terminal is configured with interchangeable first and second rear panels with the internal antenna is held on a first rear panel that is configured to releaseably engage the wireless terminal housing and the second rear panel providing the modular antenna assembly with the second external antenna is mounted to a second rear panel that is configured to releaseably engage the wireless terminal housing, the first and second rear panels being interchangeably mountable to the wireless terminal housing, and wherein the disengaging the first internal antenna replacing step is carried out by removing the first panel and then attaching the second panel so that the second antenna becomes active and the first internal antenna becomes inactive in the wireless terminal.

21. (Currently Amended) A method according to Claim 20, wherein the first internal antenna is a planar inverted F-antenna.

22. (New) A modular external antenna assembly according to Claim 1, wherein the second antenna comprises an external antenna.

23. (New) A modular antenna according to Claim 22, wherein the external antenna is configured to operate at substantially the same resonant frequencies as the internal antenna.

24. (New) A kit according to Claim 11, wherein the replacement antenna comprises an external antenna.

25. (New) A kit according to Claim 24, wherein the external antenna is configured to operate at substantially the same resonant frequencies as the internal antenna.

26. (New) A wireless terminal product according to Claim 16, wherein the second antenna comprises an external antenna.

27. (New) A wireless terminal product according to Claim 26, wherein the external antenna is configured to operate at substantially the same resonant frequencies as the first internal antenna.

28. (New) A method according to Claim 19, wherein the second antenna comprises an external antenna.

29. (New) A method according to Claim 28, wherein the external antenna is configured to operate at substantially the same resonant frequencies as the internal antenna.